

In the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1. (Amended) Apparatus for driving a lamp, comprising:
 - (a) a DC to AC converter for converting a DC signal to an AC signal;
 - (b) a self-oscillating circuit between the DC to AC converter and the lamp, the self-oscillating circuit filtering the AC signal delivered to the lamp;
 - (c) a controller for adjusting the DC to AC converter such that ~~the~~a frequency of the AC signal is based on a resonant frequency of the self-oscillating circuit; and
 - (d) a full wave sense amplifier that senses ~~the~~a current flowing through said lamp.
2. (Original) The apparatus of claim 1, wherein the self-oscillating circuit includes a step-up transformer having a primary winding that receives the AC signal and having a secondary winding that is coupled to the lamp.
3. (Original) The apparatus of claim 2, wherein the self-oscillating circuit includes a filter for the AC signal.
4. (Original) The apparatus of claim 1, further comprising a zero crossing detector for determining the resonant frequency of the self-oscillating circuit and providing an indication of the resonant frequency to the controller.
5. (Amended) The apparatus of claim 1, wherein the lamp is a discharge lamp, including a cold cathode fluorescent, metal halide ~~and~~or sodium vapor.
6. (Original) A method for driving a discharge lamp, comprising:
 - (a) converting a DC signal into an AC signal;

- (b) filtering the AC signal to the discharge lamp;
- (c) oscillating the ~~conversion of said~~converted DC signal such that the AC signal has a frequency based on a resonant frequency of ~~a load~~said lamp; and
- (d) sensing ~~the~~a full wave current flowing through said lamp.

7. (Amended) A full wave sense amplifier for sensing a periodic current flowing through a lamp, the full wave sense amplifier comprising:

means for sensing ~~the~~a positive going portion of said periodic current;
means for sensing ~~the~~a negative going portion of said periodic current; and
means for combining said negative going portion and said positive going portion into a current flow signal.

8 – 12. (Cancelled)